

REAL ESTATE

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OUTLOOK*A Monthly Forecast for the Economy and Real Estate***FORECAST SUMMARY**

- The economy grew a surprisingly strong 1.8 percent in the third quarter, according to the government's preliminary estimates. While the rate is less than half the of the average annual rate during the 1982-89 expansion, many analysts had expected a figure much lower -- perhaps even negative. The GNP report, however, may be misleading, and other indicators strongly suggest that the economy is running on a recessionary track.
- The current NAR forecast calls for a mild recession beginning in the fourth quarter of 1990, with a modest recovery beginning by the third quarter of 1991. The economy is expected to record a 1.1 percent growth rate for 1990 and gain 0.4 percent in 1991. With a recovery well under way, the economy will expand 3.0 percent during 1992. These rates compare to a 3.9 percent average for economic growth between 1982 and 1989.
- The housing slump continued in September, as housing starts fell for the fourteenth time in the past twenty months. The annual rate for August was 1,135,000 units, the lowest level since the end of the last recession in October 1982. The figure, however, was higher than the original estimate of August housing starts, which was revised up by 15,000 units to 1,142,000 units. Housing starts were about 10 percent below their pace of a year ago, and are expected to reach bottom in the current quarter.
- The rate of new homes sold declined a sharp 6.0 percent in September, and revised figures for previous months show a weaker market than had originally been thought. The sales rate for the third quarter dropped 2.2 percent below the second quarter's pace. All four regions of the country experienced declines in September.
- After posting a sizeable gain in August, the annual sales rate for existing homes dropped by 8 percent in September to 3,220,000 units, the lowest level since January 1988. Although the third quarter's sales rate bested the second quarter's by 1 percent, the September figure, coupled with uneasiness over the direction of the economy, lead the NAR forecast to call for further declines in the sales rate. The low point is expected to come during the second quarter of 1991.

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In The Land of the Lotus-Eaters

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On his ten-year journey from Troy (Anatolia, not New York) back to Ithaca (Greece, not New York) and his beloved Penelope, Odysseus and his crew faced many and varied dangers. Perhaps the most seductive of these lay in the land of the Lotus-Eaters, a tribe who consumed a diet (of lotus leaves, not spreadsheet software) designed to induce pleasure and amnesia and who tempted all visitors with a similar prospect.

In many ways, the United States economy has, for the past decade or so, been much like the land of the Lotus-Eaters. We have enjoyed a deceptive sense of prosperity and forgotten about the real business of building a sound economy. Regardless of the prospects for recession--or at least unacceptably slow growth--over the next six to twelve months, we have indulged a false sense of optimism and may well have left ourselves poorer for the future.

Prior to the oil shock of 1973, the American economy had experienced real growth of epic proportions. Labor productivity, largely the result of a growing capital stock, increased at an average annual rate of 3.5 percent, well above the historical trend of 2.5 percent that had prevailed earlier in the century. Since prosperity in a modern industrial society is critically linked to growth and productivity, these were, indeed, golden years. The average forty-year old male worker in 1953 could look forward to a 54 percent increase in real income by the time he was fifty, largely because of increasing productivity.

After 1973, the world became a different place. As foreign economies developed, markets which had previously been exclusively American were now open to intense competition. With the collapse of the international monetary system and the abandonment of gold, the pressures on the dollar as a reserve currency became intense. The result was a built-in bias toward inflation in the domestic economy (intensified by the oil shocks of 1973 and 1979), a retrenchment of American industry and a sharp decline in productivity. From 1973 through the end of the decade, productivity increases averaged 0.9 percent. The average male worker who was forty years old in 1973 had suffered a decline of 14 percent in real income by 1983.

But, with the exception of the contraction of 1980-82, the years since 1973 have been generally ones of growth and relative prosperity. How has this been accomplished? Enter the lotus. The reality of the American economy has been masked by social demographic and political changes.

Socially, the number of childless, two-earner households increased rapidly as more women entered the labor force and postponed childbearing. This meant that the percentage of income available for consumption increased over the decade, fueling expansion. The household with no mortgage or child-rearing expenses could more readily consume. As a consequence, the

savings rate was driven down to historic lows. Currently, more than two-thirds of all married couples rely on two incomes, leaving little room for continued expansion. There simply are no third incomes on the horizon.

Demographically, the "post-war" generation has come into its maturity during this decade. Thus, more workers produced, earned and consumed than in the past. This has created the delusion of "better," when the reality is simply "more." Succeeding generations will not be nearly as large as this one and there will be a slump in demand as fewer individuals pass through prime consumption years.

Politically, we have made a national decision to borrow from others and have chosen the rest of the world as our benefactor. Foreign capital flows have become the stuff of legend to the point where no cocktail party worth the name is complete without some reference to our national dependence on foreign funds. We have in fact maintained our prosperity by living beyond our means, with the full acquiescence of our "friends." (Perhaps we need to form a "Mothers Against Foreign Borrowing" and take away the government's credit rating when it's had too much.)

But our partners will only lend to us as long as we keep our real interest rates high relative to the rest of the world. As high real rates mean that investment becomes expensive, capital growth staggers, and productivity growth remains low. And like the Lotus-Eater looking for the next bush, we need foreign funds. We can't at this point lower our rates and discourage the inflow.

So, how do we get out of this dilemma? How do we change our diet? The solutions are obvious, but not easy. We first of all have to break our dependence on the international markets, so that we can direct economic policy to domestic goals. This means making a continuing real effort to eliminate the federal budget deficit. The recent budget agreement is a start, but only that. What looks like \$500 billion saved may well be much less as less than brilliant economic performance robs us of promised out-year savings. More fiscal restraint must come in the future.

Second, we need to postpone consumption and tilt the balance of economic activity toward savings and investment, so that we can become a productive competitor in world markets. This means increasing taxes on consumption activities and using selected preferences to encourage savings. Both these measures require real sacrifice on the part of the American public, but are absolutely crucial to the construction of a firm base for real future prosperity.

Ultimately, Odysseus broke the spell of the Lotus-Eaters, led his crew away from their island and finally reached Ithaca. It's time to take a clear look at this economy through eyes fixed on real values and turn away from the temptation of the now.

Outlook for the Economy and Real Estate

Just as most observers were declaring that a recession was either underway or imminent, the government released data showing surprising strength in economic growth. While the 1.8 percent annual rate of GNP growth is less than half of the average growth rate during the 1982-89 expansion, many analysts had expected a figure much lower -- perhaps even negative. Yet the observers were not wrong: The economy is running on a recessionary track.

The GNP report could be misleading for a couple of reasons. First, the quarterly figures disguise a more moderate monthly pattern of consumer spending, which will be discussed below. Second, the numbers are based upon incomplete data and are consequently biased toward economic activity in July and August rather than in September. Revisions will be released twice before year end, and most analysts suspect that the 1.8 percent rate will be brought down. The second-quarter growth rate, for example, was initially estimated at 1.2 percent but has since been revised down to 0.4 percent.

A mild recession remains in the NAR forecast. The downturn is expected to begin in the current quarter, but the subsequent recovery is anticipated to begin by the second quarter of 1991. Year over year, economic growth is projected at 0.4 percent in 1991 and 3.0 percent in 1992.

Worried Consumers Spend More ... Or Do They?

At first glance, it appears that consumers are relieving their anxiety over the Persian Gulf standoff, higher taxes, and a possible recession by heading to the mall. Despite October's plunge in consumer confidence -- the largest drop ever captured by the Conference Board -- consumer spending in the third quarter rose \$23.9 billion over the second quarter. The increase during the second quarter was only \$1.5 billion. One important source of strength was spending on autos, which sold at their fastest pace in a year during September.

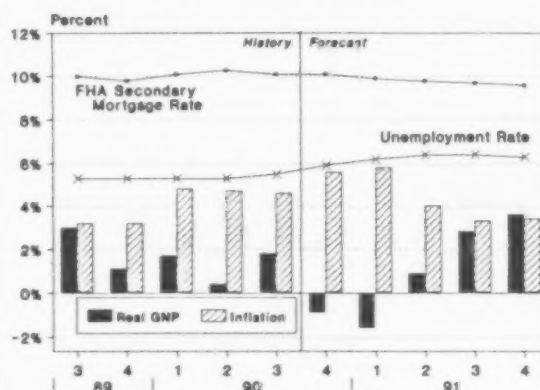
Yet the quarterly figures hide an inauspicious monthly pattern of consumer spending. A huge burst of spending in June gave the third-quarter figures a high starting point. Even with moderate increases in July and September and a small decline in August, the third-quarter average stood much higher than the second-quarter average. Consequently, the growth rate between the two quarters appears to reflect strong spending growth in the third quarter.

The flip side -- since these statistical quirks even out over time -- is that even moderate monthly increases in October, November and December could lead to a decline in the fourth-quarter growth rate, since it will be calculated against the relatively high third-quarter figure. In other words, consumer spending will have to be quite robust in the final quarter to avoid a negative growth rate.

Consumers to Cut Back Over the Next Few Months

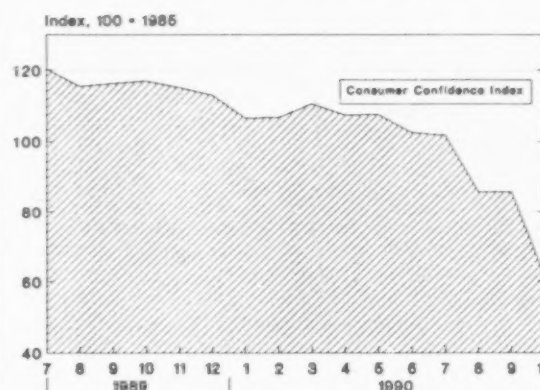
Two factors may lead to cutbacks in consumer spending over the next several months. First, disposable income, after adjustment for inflation, fell at a 4.9 percent annual rate in August and September, which suggests limited spending ahead. Second, data for September imply that consumers used their savings to maintain spending. In the months ahead consumers are likely to trim spending to restore their savings balances.

The Economic Outlook



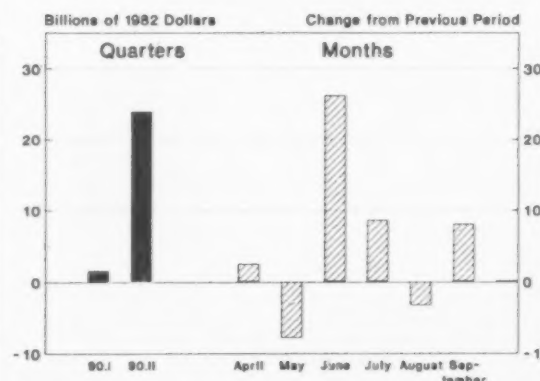
Sources: Bureau of Economic Analysis; NAR forecast

When the Going Gets Tough ...



Source: The Conference Board

Consumption's Halloween Disguise



Source: Bureau of Economic Analysis

Why a Recession Still Looks Imminent

With consumer spending expected to cool, will some other component be able to pick up the slack? Seemingly not, as many other factors point to weakness. For example, the government's index of leading indicators followed August's steep 1.2 percent drop with another 0.8 percent decline in September, when only one of the index's eleven components, business investment contracts, was higher over the previous month. Also in September, the value of new construction fell for the sixth consecutive month, leaving it declining at a 13 percent annual rate over the period.

Meanwhile, a survey of the nation's manufacturing firms shows that orders for durable goods fell by 1.4 percent in September. The value of new orders for all manufactured goods rose only 0.1 percent, but even that figure overstates the health of manufacturing since it reflects the impact of higher oil prices on petroleum products, not higher overall volume. In addition, the widely watched index computed by the National Association of Purchasing Management fell to 43.4 percent in October, its lowest level since late 1982.

The unemployment rate has crept up about a half point since June and stands at 5.7 percent. Total employment fell by 68,000 workers in October, with manufacturing accounting for 61,000 of those jobs. Since March 1989, manufacturing payrolls have been slashed by 486,000 jobs.

Exports, a significant contributor to the expansion over the past few years, remain the most promising area for growth. Although it will take time for its effects to work through, the lower dollar will allow U.S. firms to price their products more aggressively overseas.

The Dollar Continues to Fall -- What's A Fed to Do?

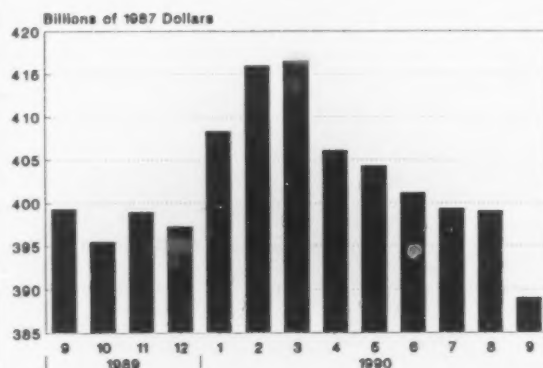
During October, while Washington wrangled with the budget and recession edged nearer, the U.S. dollar fell to record lows. Even the Persian Gulf crisis has strengthened the dollar, as increased international tension usually does. The dollar's decline reflects relatively low U.S. interest rates. The higher rates in Europe and Asia are attracting the international capital that until recently flowed to the U.S. If the dollar continues falling, interest rates will have to rise -- or at least be higher than they otherwise would have been -- to satisfy the need for credit in the U.S.

This has important implications for the Federal Reserve. Responding to the budget agreement, the Fed cut the key short-term federal funds rate by a quarter of a point -- not enough for some on Capitol Hill. The case for easing monetary policy further is anything but clear cut: Too much ease will send the dollar down further and increase anxiety over inflation, even as it runs at a 10 percent pace. That means higher long-term rates. Too little ease means that short-term interest rates stay up, possibly pushing the economy further into recession.

Two Important Risks

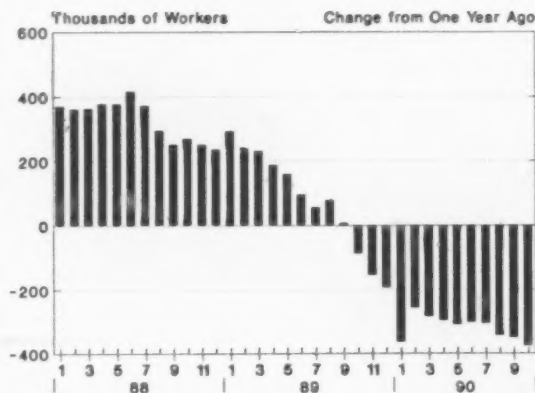
As projected, the recession is milder than the typical post-World War II downturn. A deeper and more severe recession would be the likely result of either a war in the Persian Gulf or the continued unraveling of the financial condition of major U.S. depository institutions.

Construction Expenditures Slow



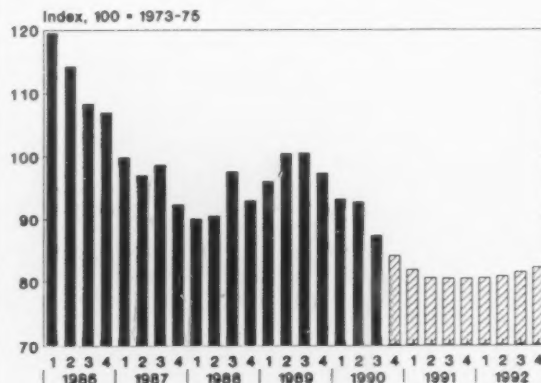
Source: Laurence H. Meyer & Associates

Manufacturing Payrolls



Source: Bureau of Labor Statistics

The Dollar Continues Its Fall



Sources: Federal Reserve Board, NAR forecast

Housing Starts

(Seasonally Adjusted Annual Rates, in Thousands)

National Data

	Total	SF	2-4	5+
Sep 1989	1,263	969	56	238
May 1990	1,206	897	36	273
Jun 1990	1,189	889	42	258
Jul 1990	1,153	875	29	249
Aug 1990	1,142	841	31	270
Sep 1990	1,135	877	36	222

Annual Averages:

1988	1,491	1,086	59	347
1989	1,386	1,010	55	321

Percent Changes in September 1990 since:

Sep 1989	-10.1	-9.5	-35.7	-6.7
Aug 1990	-0.6	4.3	16.1	-17.8

Regional Data

	Northeast	Midwest	South	West
Sep 1989	160	247	486	370
May 1990	127	256	487	336
Jun 1990	113	241	535	300
Jul 1990	113	225	493	322
Aug 1990	118	241	440	343
Sep 1990	105	249	453	328

Annual Averages:

1988	240	273	574	404
1989	183	270	536	397

Percent Changes in September 1990 since:

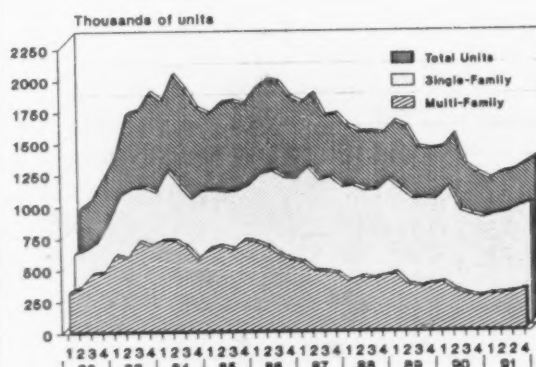
Sep 1989	-34.4	0.8	-6.8	-11.4
Aug 1990	-11.0	3.3	3.0	-4.4

Source: Bureau of Census, Construction Reports, Series C25

For the eighth consecutive month, housing starts fell in September to an annual rate of 1,135,000 units -- the lowest rate since the end of the last recession in October 1982. September also marks the fourteenth month in the past twenty that the rate of starts has fallen.

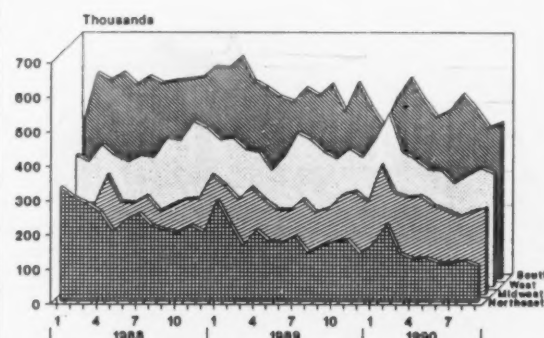
Given the growing perception that a recession is imminent, along with the threats of war, significantly higher inflation, and budget-related government paralysis, the 7,000-unit decline from August's pace was relatively mild. The decline was only 0.6 percent, much less severe than the average 4.4 percent decline in the previous seven months. Starts during the third quarter ran at a 1,143,000-unit pace, down 5.3 percent from the second quarter's rate.

Housing Starts



Source: Bureau of Census; Real Estate Outlook forecast

Housing Starts by Region



Source: Bureau of Census

Housing starts are projected to reach bottom in the fourth quarter of 1990 at a 1,095,000 annual rate. Slightly lower interest rates, largely a result of the slumping economy, should give a modest boost to housing starts during 1991. By the fourth quarter of 1991, starts should be at a 1,271,000-unit pace, and economic recovery is expected to spur starts to 1,298,000 units in 1992.

Behind the national decline of 9 percent on a year-to-date basis, the regional performances in 1990 have been widely divergent. The slump is concentrated in the Northeast, where starts are down 28 percent in 1990's first nine months. Both the South and the West are down by about 9 percent. For the Midwest, meanwhile, 1990 has seen a 2 percent improvement so far.

New Home Sales

(Seasonally Adjusted Annual Rates, in Thousands)

National Data

		Mo. Ago % Chg.	Yr. Ago % Chg.
Sep 1989	638	-11.3	-7.7
Oct 1989	636	-0.3	-11.4
Nov 1989	637	8.0	5.7
Dec 1989	633	-7.9	-5.4
Jan 1990	613	-3.2	-12.9
Feb 1990	606	-1.1	-2.7
Mar 1990	558	-7.9	0.4
Apr 1990	533	-4.5	-12.6
May 1990	536	0.6	-17.7
Jun 1990	550	2.6	-14.9
Jul 1990	545	-0.9	-26.5
Aug 1990	535	-1.8	-25.6
Sep 1990	503	-6.0	-21.2

Annual Averages:

1988	676	0.8
1989	654	-3.3

Regional Data

	Northeast	Midwest	South	West
Sep 1989	62	102	260	214
Mar 1990	84	94	221	159
Apr 1990	86	90	209	148
May 1990	71	91	215	159
Jun 1990	80	94	233	143
Jul 1990	71	94	242	138
Aug 1990	64	93	242	137
Sep 1990	54	91	223	136

Annual Averages:

1988	101	98	271	206
1989	90	103	258	202

Percent Changes in September 1990 since:

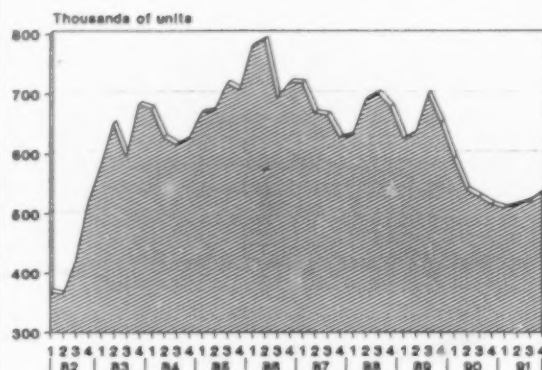
Sep 1989	-12.9	-10.8	-14.2	-36.4
Aug 1990	-15.6	-2.2	-7.9	-0.7

Source: Bureau of Census, Construction Reports, Series C25

The most recent report on new home sales shows a housing market weaker than had been previously thought. First, the report provided the initial estimate of the rate of new homes sold in September: 503,000 units, down 32,000 units, or 6 percent, from August's rate. The sharp decline was the steepest since March and the ninth drop in the past twelve months. Second, rates for June, July, and August were all revised downward. Before the revisions, the average sales rate for the three months stood at 556,000 units; the new figures yield a sales rate of 543,000 units.

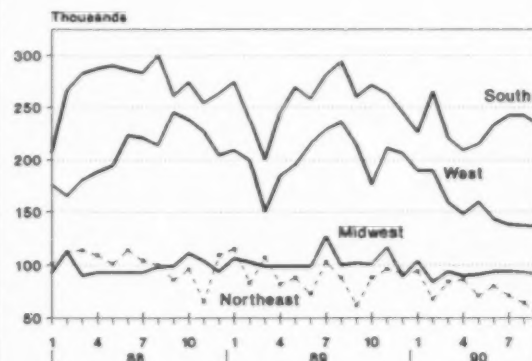
The revisions and September's low figure place the third-quarter sales rate 2.2 percent below the second quarter's pace. The NAR forecast calls for the rate to fall

New Home Sales



Source: Bureau of Census; Real Estate Outlook forecast

New Home Sales by Region



Source: Bureau of Census

another 3.6 percent by the first quarter of 1991 before beginning a slow climb. The annual figure for 1991 is projected to be 520,000 units, more than 20 percent below the 1989 figure. Although 1992 will be a year of recovery, the annual rate will stand 18 percent below the 1989 figure.

All regions of the country suffered declines in the sales rate in September. The largest drop was recorded in the Northeast, which sustained a 16 percent decline. The South fell by 8 percent, and the Midwest dropped 2 percent. The West recorded the smallest decline -- less than 1 percent -- but nevertheless the region's sales rate stands at less than two-thirds of the rate recorded a year earlier.

Existing Single-Family Home Sales (Seasonally Adjusted Annual Rates, in Thousands)

National Data

		Mo. Ago % Chg.	Yr. Ago % Chg.
Sep 1989	3,510	2.0	-3.8
Oct 1989	3,490	-0.6	-5.2
Nov 1989	3,560	2.0	-4.0
Dec 1989	3,560	0.0	-9.2
Jan 1990	3,470	-2.5	-5.2
Feb 1990	3,400	-2.0	-4.2
Mar 1990	3,400	0.0	-0.9
Apr 1990	3,330	-2.1	-3.2
May 1990	3,300	-0.9	1.5
Jun 1990	3,330	0.9	0.0
Jul 1990	3,330	0.0	-1.5
Aug 1990	3,500	5.1	1.7
Sep 1990	3,220	-8.0	-8.3

Annual Averages:

1988	3,594	-1.9
1989	3,467	-3.6

Regional Data

	Northeast	Midwest	South	West
Sep 1989	600	960	1320	620
Apr 1990	520	920	1300	580
May 1990	520	880	1320	570
Jun 1990	490	960	1310	580
Jul 1990	560	930	1310	530
Aug 1990	520	990	1400	570
Sep 1990	520	920	1260	520

Annual Averages:

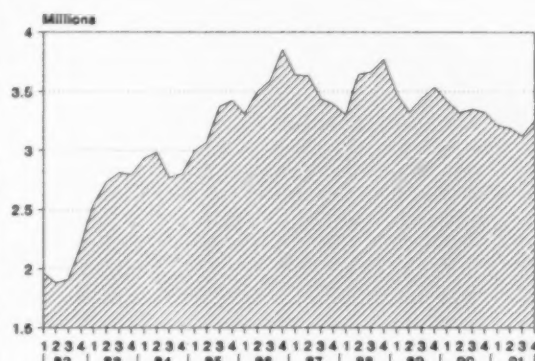
1988	669	929	1348	643
1989	590	931	1320	617

Percent changes in September 1990 since:

Sep 1989	-13.3	-4.2	-4.5	-16.1
Aug 1990	0.0	-7.1	-10.0	-8.8

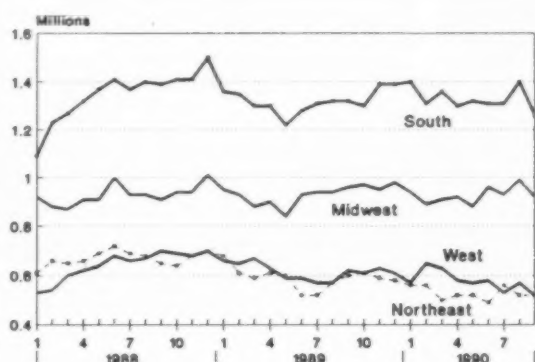
Source: National Association of Realtors, "Home Sales"

Existing Home Sales



Source: NAR Economics & Research; Real Estate Outlook forecast

Existing Home Sales by Region



Source: NAR Economics & Research

After posting a sizable gain in August, the annual sales rate for existing homes dropped by 8 percent in September to 3,220,000 units, the lowest level since January 1988. In addition, revised figures released with the most recent data also scaled back July's gain. Initially reported at a 3.3 percent increase over June, the new figures show no change for the month.

Although the third quarter's sales rate of 3,350,000 bested the second quarter's by 1 percent, the September figure, coupled with the uneasiness over the direction of the economy, lead the NAR forecast to call for further declines in the sales rate. The low point is expected to come during the second quarter of 1991, when the sales pace is expected to hit 3,203,000 units. For 1991 relative

to 1990, the rate is expected to fall 2.9 percent. A modest but sustainable recovery beginning in mid-1991 is expected to bring the 1992 rate up by 3.1 percent. The market will be helped by lower mortgage rates -- the 30-year rate is expected to average 9.4 percent in 1992.

While the housing market is in a slump, it isn't moribund. Both the Northeast and the South reversed decreases in the sales rate in July by picking up 14.3 percent and 6.9 percent, respectively. The South's 1,400,000-unit annual rate during July was stronger than the region's annual rates in both 1988 and 1989. The Midwest's July rate just matches that of the two previous years. The West, however, was about 16 percent off in July from its 1989 performance.

Single-Family Home Prices

(In Dollars)

National Data

	Median		Average	
	Existing	New	Existing	New
Sep 1989	93,800	120,000	118,300	151,100
Apr 1990	95,600	130,000	117,800	153,400
May 1990	95,600	125,000	118,700	150,600
Jun 1990	97,500	125,000	121,100	150,400
Jul 1990	98,300	119,900	122,000	149,700
Aug 1990	97,100	118,400	120,500	144,600
Sep 1990	94,300	115,000	116,500	142,300
Annual Averages:				
1988	89,200	113,400	112,500	138,900
1989	92,900	120,400	118,000	148,300

Percent changes in September 1990 since:

Sep 1989	0.5	-4.2	-1.5	-5.8
Aug 1990	-2.9	-2.9	-3.3	-1.6

Regional Data

Median Prices for Existing Single-Family Homes

	Northeast	Midwest	South	West
Sep 1989	145,700	72,200	84,300	143,100
Apr 1990	140,700	75,300	85,900	137,600
May 1990	141,300	73,500	85,100	141,800
Jun 1990	148,300	75,900	87,500	138,100
Jul 1990	146,900	76,000	88,800	139,700
Aug 1990	145,300	75,300	86,900	140,240
Sep 1990	137,100	74,000	85,900	134,700

Annual Averages:

1988	142,500	68,200	82,200	124,700
1989	145,100	71,200	84,400	139,800

Percent changes in September 1990 since:

Sep 1989	-5.9	2.5	1.9	-5.9
Aug 1990	-5.6	-1.7	-1.2	-4.0

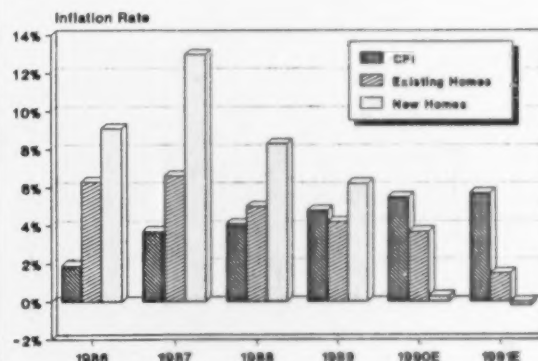
Source: National Association of Realtors, "Home Sales"

Median prices of existing and new single-family homes both fell by 2.9 percent in September. The median price for existing homes stands at \$94,300, up \$500, or 0.5 percent, from its level of a year ago. The median price has fallen \$4,000 since its recent peak in July. The median price for new homes stands at \$115,000, down \$5,000, or 4.2 percent, from its year-ago level. It has not advanced in any month since April, when it stood at \$130,000.

Average prices also fell in September for both new and existing homes. The decline for existing homes places the average \$1,800, or 1.5 percent, below its year-ago level; the average for new homes stands \$8,800, or 5.8 percent, below its year-ago level.

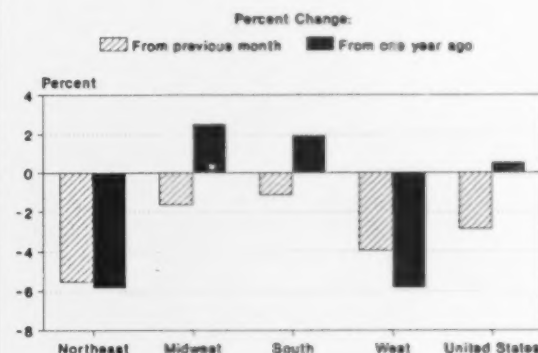
The unequal regional difficulties in housing markets

Home Prices



Source: Bureau of Census; E Real Estate Outlook forecast

Home Prices by Region



Source: NAR Economics & Research; Real Estate Outlook forecast

is reflected in the median prices for existing homes. Although all four regions lost ground in September relative to August, the Midwest and the South suffered milder declines. Relative to year-ago figures, both the Northeast and the West lost 5.9 percent, while the Midwest and the South have posted gains, of 2.5 percent and 1.9 percent, respectively.

The median price on new homes is projected to fall 0.2 percent in 1991, while the median price on existing homes is expected to gain 1.5 percent.

Robert D. Barr
Director of Forecasting
Forecasting & Policy Analysis Division

BUBBLE BATHOS

Introduction

One of the most talked about and least understood provisions of the 1986 Tax Reform Act (TRA) is the "bubble" created by the 33-percent marginal tax rate imposed on some upper middle-income taxpayers. As one senator said on the Senate floor during recent debates on the 1991 budget, the bubble may be the first tax provision to be repealed because it was too complicated.

The final version of the Omnibus Budget Reconciliation Act of 1990 eliminated the current bubble as predicted. However, a new bubble affecting a higher income range was adopted in its stead. While the mechanical structure of the new bubble differs from the current bubble, many of the issues raised in regard to the current bubble also apply to the new bubble. In fact the purpose of the new bubble is the same as that of the current bubble: to extract higher revenue without directly increasing income tax rates.

Technically, TRA collapsed the number of marginal tax brackets from 14 to 2, a 15-percent bracket on the first increments of income earned and a 28-percent bracket on additional income. However, a 5-percent surcharge was added on taxable income of some upper middle-income taxpayers in order to prevent TRA from losing revenue compared to the previous tax system. This 5-percent surcharge pushes the marginal tax rate for these taxpayers from 28 to 33 percent thereby creating, in effect, a third marginal tax bracket. Eventually, at higher taxable income levels the marginal tax rate drops once again to 28-percent. Consequently, a married couple with a taxable income of \$80,000 faces a 33-percent marginal tax rate while another couple with a taxable income of \$200,000 faces only a 28-percent marginal tax rate.

The drop in the marginal tax rate for the higher-income couple has led many individuals, mistakenly, to believe that the marginal-tax-rate bubble creates an average-tax-rate bubble that causes the lower-income couple's total tax liability as a share of their income subject to tax to exceed that of the higher-income couple. As a result of this widespread misperception, some members of Congress proposed to burst the marginal-tax-rate bubble by extending the 33-percent marginal-tax-rate bracket to include the highest-income

taxpayers in order, they believe, to confer a greater degree of fairness on the tax system.

After much negotiation, Congress eventually agreed to eliminate the current bubble by dropping the 5-percent surcharge and increasing the top marginal tax rate to 31 percent. In addition, Congress agreed to phase out the benefit of personal exemptions at the rate of 2 percent for every \$2,500 above an adjusted gross income of \$100,000 for single taxpayers and \$150,000 for couples filing jointly. This phaseout provision will create a new marginal-tax-rate bubble for single taxpayers with income between \$100,000 and \$225,000 and for couples with income between \$150,000 and \$275,000. The marginal rate for taxpayers in this range will be increased by nearly 0.5 percent per personal exemption claimed. Although the NATIONAL ASSOCIATION OF REALTORS[®] took no position with respect to proposals to eliminate the current bubble, several aspects of this issue still merit detailed consideration.

Many tax experts would argue that neither the current bubble nor the new bubble is or will be unfair in the sense that the tax liability of some upper-middle-income taxpayers is proportionally higher than that of the highest-income taxpayers. In fact, both bubbles actually are designed to increase the proportional tax liability of higher-income taxpayers relative to that of lower-income taxpayers, i.e., to make the tax system more progressive. The perception that either bubble taxes or will tax some upper-middle-income taxpayers disproportionately more than the highest-income taxpayers is caused partly by a misunderstanding of the difference between marginal and average tax rates and partly by confusion about the definition of average, or effective, tax rates. The remainder of this paper is devoted to dispelling misconceptions about the effect of marginal-tax-rate bubbles on average tax rates with particular emphasis on the current bubble, followed by a discussion of the effect of the new bubble and the new limit on itemized deductions created by the 1990 Budget Act.

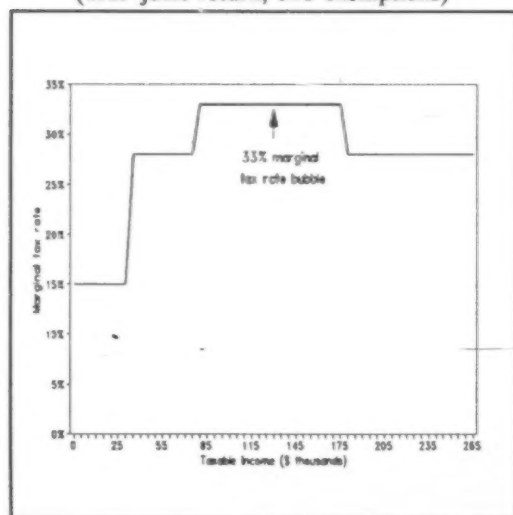
The Mechanics of the Bubble

The reason that the 5-percent surcharge on taxable income in the current bubble range does not cause a disproportionate rise in tax

liability is that taxpayers with taxable income in this range benefit to some extent because the first \$30,950 of a joint filer's taxable income and the first \$18,600 of a single filer's income are taxed at only 15 percent and because their taxable income is reduced by personal exemptions. Taxing the first increments of income at 15 percent instead of 28 percent results in a tax saving of \$4,023.50 for joint filers with taxable income in the bubble range. In addition, each \$2,000 personal exemption saves \$560, a total of \$1,120 for joint filers, assuming a marginal tax rate of 28-percent. The surcharge simply serves to phase out these benefits gradually over a broad range of incomes such that individuals with taxable income exceeding the bubble range receive no benefit either from personal exemptions or from the 15-percent rate thereby ensuring that the highest-income taxpayers face a 28-percent tax rate on all their income.

Figure 1 shows the marginal tax rate schedule for joint filers claiming two personal exemptions. The 5-percent surcharge creates a bubble in the marginal tax rate for joint filers with taxable income between \$74,850 and \$177,720. At \$155,320 of taxable income the \$4,023.50 benefit from the 15-percent rate applied to the first \$30,950 of taxable income is completely eliminated by the 5-percent surcharge. The \$1,120 benefit from two personal exemptions is recaptured by applying the 5-percent surcharge to taxable income between \$155,320 and \$177,720.

Figure 1
Marginal Tax Rate Bubble
(1989 joint return, two exemptions)



The Average-Tax-Rate Bubble Controversy

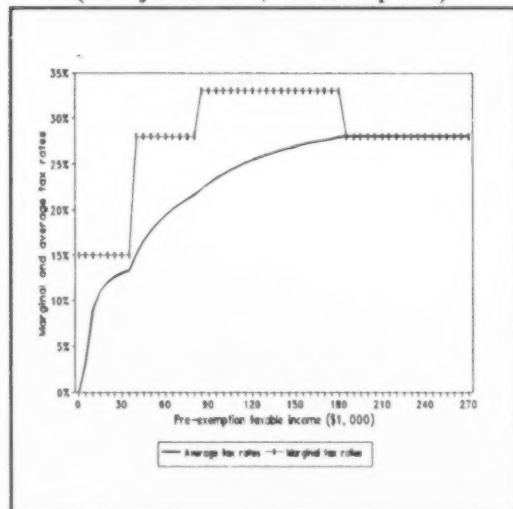
The fact that a marginal-tax-rate bubble exists, by itself, says little about the vertical equity of a tax system. What matters is whether the marginal-tax-rate bubble creates an average-tax-rate bubble. The average tax rate is the best measure for equity comparison purposes since it measures total tax liability as a share of taxable income. The marginal tax rate, in contrast, does not measure the true burden of tax liability since it only measures the additional tax liability resulting from the last increment of taxable income. A joint filer with taxable income of \$100,000 and claiming two exemptions is subject to a 33-percent marginal tax rate, but his average tax rate is only 25.2 percent.

A controversy has arisen among tax experts not about the fairness of the marginal-tax-rate bubble per se, but about whether the current marginal-tax-rate bubble causes a significant average-tax-rate bubble. The existence of an average-tax-rate bubble hinges on the definition of average tax rate. Historically, the average tax rate has been defined as taxes paid divided by taxable income, where the latter equals adjusted gross income minus personal exemptions minus itemized deductions for itemizers or adjusted gross income minus the standard deduction minus personal exemptions for nonitemizers.

Such a definition was logical before TRA because personal exemptions were not taxed and therefore should not have been included in the denominator of the average tax rate. At a certain taxable income level, however, TRA imposes a 5-percent surcharge on taxable income above the threshold until the benefit of all personal exemptions is phased out. The benefit of personal exemptions is completely taxed away for individuals with taxable incomes above the bubble range. Thus, for the highest-income taxpayers, it makes little sense to measure taxable income as adjusted gross income less personal exemptions when the benefit of personal exemptions is completely eliminated by the 5-percent surcharge.

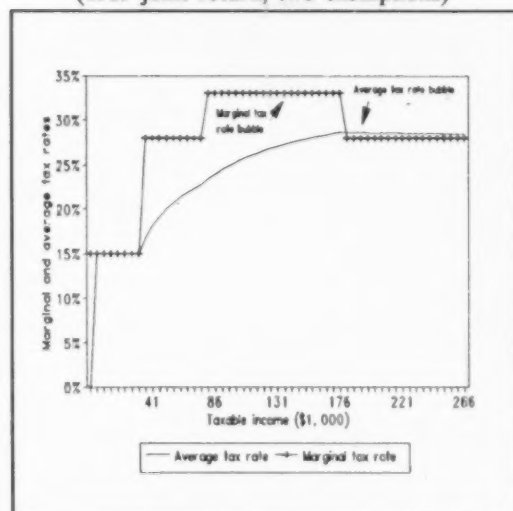
As a result, some tax experts argue that the definition of the denominator should be modified to include personal exemptions.¹ Increasing the size of the denominator, naturally, reduces the average tax rate calculated. In fact, for taxpayers with income below the bubble range, increasing the denominator by including personal exemptions results in a significantly understated average tax rate since these taxpayer's taxable incomes are reduced by the full amount of the allowable personal exemptions.

Figure 2
Marginal and Average Tax Rates Using
Pre-exemption Taxable Income as the Base
(1989 joint return, two exemptions)



Other tax experts contend that because the Internal Revenue Service continues to define average tax rate the same way it always has, it is inappropriate to change the definition.² Figure 2 shows that no average-tax-rate bubble occurs using taxable income plus exemptions as the denominator.

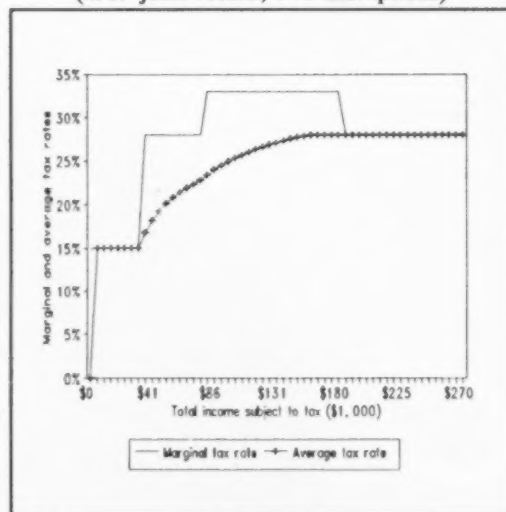
Figure 3
Marginal and Average Tax Rates
Using Taxable Income as the Base
(1989 joint return, two exemptions)



However, Figure 3 reveals that when taxable income is used as the denominator, a small bubble results in the average tax rate. This bubble, though, is many orders of magnitude smaller than the marginal-tax-rate bubble and applies only to those with taxable incomes above \$155,000.

An alternative definition which is defensible from the perspective of economic theory would add to the taxable income base only the amount of income that is taxed additionally to recover the benefit of personal exemptions. Figure 4 demonstrates that no average-tax-rate bubble occurs when the alternative definition is applied. Effective tax rates using the alternative definition are calculated in the table on the next page for three sample returns.

Figure 4
Marginal and Average Tax Rates
Using Income Subject to Tax as the Base
(1989 joint return, two exemptions)



As the table shows, a joint filer claiming two exemptions with taxable income of \$100,000 has a marginal tax rate of 33 percent. Yet, the total amount of taxes he actually pays is only 25.23 percent of income subject to tax. In comparison, a joint filer claiming two exemptions with taxable income of \$180,000 has a marginal tax rate of only 28 percent, but his total tax bill is also 28 percent of income subject to tax (\$184,000). When this joint filer's taxable income exceeds \$177,720, the maximum amount subject to the 5-percent surcharge, his marginal tax rate becomes his average tax rate.